UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

Ecological Site Description

Site name: DRY FLATLAND
Site number: R-273ZY018PR
Major Land Resource Area: 273 Semiarid Coastal Plains
Interstate correlation: NONE

Physiographic features: Elevation of this site ranges from sea level to 1200 ft. Most of the area is nearly level to gently slopping. Elevation increases gradually from the beaches on the Caribbean Sea to the foothills of the semiarid mountains to the north. Limestone ridges are similar to those in the Humid Coastal Plains but they lack the striking karst features. All drainage is superficial and flows in a southerly direction.

Climatic features
Frost-free period: 365 DAYS
Freeze-free period: 365 DAYS
Mean annual precipitation: 33 INCHES
Mean annual air temperature: 79ºF
Mean annual soil temperature:
Monthly moisture and temperature distribution:

	Mean Precipitation (inches)	**Percent Precipitation (%)**	**Mean Temperature (ºF)**
January	.78	2.36	76
February	.72	2.18	76
March	.86	2.60	77
April	1.92	5.81	78
May	2.92	8.84	80
June	3.13	9.48	81
July	2.91	8.81	82
August	4.45	13.48	82
September	5.26	15.93	81
October	5.63	17.06	81
November	3.18	9.63	79
December	1.20	3.33	77
Mean annual	**33**		**79ºF**

Other climatic features: A rainy season prevails from July to November and a pronounced dry season occurs during the remainder of the year. Hurricanes are most

likely to occur August through November, and are characterized by strong winds and torrential rains. Surface water is scarce because of limited rainfall and high evaporation rates. Low rainfall and steep topography of the adjacent semiarid mountains to the north provide little additional surface water.

Associated water features: Streams and rivers generally are intermittent. In places artesian pressure brings saline and sodic ground water to the surface.

Furnias, (Laguna Guánica)
Laguna Cartagena

Elevation Aspect: 50 to 200 ft.

Percent Slope: 0 to 5

Soils: Soils of this site are deep, moderately well drained to somewhat poorly drained, fine textured (clay) alkaline, slow permeability, gently sloping in the dry flat areas. The available water holding capacity is high.

Major Soil Taxonomic Units correlated to this site include:

Fraternidad, FrA, FrB, FtB
Fraternidad, FvA, FvB
Paso Seco, PaB
Ponceña, PcB, PcC2
Santa Isabel, Sn

Plant communities:

This site is dominated by short grasses such as alexander grass and bermuda grass. Grasses constitute approximately 62%, forbs 28%, shrubs 2% and trees 8% of the total vegetative composition.

Major plant species composition

Some introduced grass species are adapted to this site. These highly palatable species include guinea and buffel grass. They may exist in varying levels of dominance due to past or existing grazing pressure.

GRASSES AND GRASSLIKES

Scientific Symbol	Common Name	Group	Pounds per Acre	Percent by Weight	Percent Allowed For Group
BOPE2	Hurricane grass	1			
BRSU	Alexander grass	1			
CEEC	Southern sandbur	1			

CEIN4	Sandbur	1			
CYDA	Bermuda grass	1			
DAAE	Egyptian grass	1			
DIAN	Angleton grass	1			
SPIN4	Whorled dropseed	1			
SPPY2	Matojo de piramide	1			

FORBS

Scientific Symbol	Common Name	Group	Pounds per Acre	Percent by Weight	Percent Allowed For group
BUOB	Lechecillo	2			
HECU3	Lechecillo	2			
HEGU2	Nuececilla	2			
JAGO	Tautaba	2			
LAIN2	Wild sage	2			
MAGN	Sea tea	2			
OPBO	Tuna catus	2			
OPRE2	Suckers	2			
SIAG	Horseweed	2			
SUMA2	Quitaran	2			

Shrubs and Trees

Scientific Symbol	Common Name	Group	Pounds per Acre	Percent by Weight	Percent Allowed For group
ACFA	Sweet acacia	4			
BUBU	Black olive	4			
DAEX	Candlewood	4			
ELSI9	Turpentine	4			
LELE10	Leucaena	3			
SWMA	Caoba dominicana	4			
TAIN	Tamarind	4			

Ground Cover and Structure

	Height Above the Ground											
	Not applicable		6 to 12 inches		12 to 24 inches		24 to 60 inches		60 to 80 inches		180 to 240 inches	
	% Ground cover	% Canopy cover	% Ground cover	% Canopy cover	% Ground cover	% Canopy cover	% Ground cover	% Canopy cover	% Ground cover	% Canopy cover	% Ground cover	% Canopy cover
											1	4
Trees												
Shrubs					1	8						
Grasses and grasslikes					10	75						
Forbs					1	15						
Cryptogams												
Coarse fragments												
Bare ground												
Litter												

Transition Pathways:

As high palatable grasses are removed from the plant community they are replaced by bermuda grass, hurricane grass, angleton, whorled dropseed and pyramid dropseed. As the grasses are lost from the site some forbs such as barilla and tuna catus increase. Mesquite and sweet acasia also increase as the grass component of the plant community is reduced.

Total annual production: 3500 lbs/acre

Plant Growth Curves:

Growth curve number: PR001
Growth curve name: PR PLANT GROWTH CURVE
Growth curve description: Native and naturalized grasslands.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
6	5	4	7	12	10	9	10	11	10	9	7

Animal Community:

This site is important for several wildlife species. Major species using the site include:

Antillean euphoina
Antillian mongo hummingbird
Bairds sandpiper
Balckfaced grassquit

Bananaquit
Bank swallow
Black bellied plover
Caribbean elaenia
Cattle egret
Cave swallow
Common ground dove
Common yellowthroat
Dowithcers
Gray kingbird
Great blueheron
Greater yellowleg
Helmeted guinea fowl
Iguana iguana (invasive)
Killdeer
Least grebe
Least sandpiper
Lesser antillean pewee
Lizards
Morning mockingbird
Puertorican flycatcher
Puertorican vireo
Puertorican woodpecker
Red knot
Roseate terns
Ruddy turnstone
Semipalmated plover
Shiny cowbird
Sparrow hawk
Turkey vultre
Western sandpiper
White rumped sandpiper
Yellowfaced grassquit
Zenaida dove

Associated sites:

Similar sites
Plant communities, production, and vigor of this site is not similar enough to other sites in the region to cause a problem or concern.

Site documentation

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Revised: 05/2002 E. Más, J. Lugo, S. Ríos

Supporting data for site development: Supporting data include clipping studies, and historical writing of the area. More documentation and study are needed to fully understand this site and the transitions that occur.

Sampling techniques
SCS-Range 417

Type locality: Lajas Valley, Lajas, PR

Field Offices: San Germán

References:

Lajas Valley Soil Survey
USDA, NRCS. 1997. National Range and Pasture Handbook.

Site Approval:
This site has been reviewed and approved for use:

USDA NRCS Resource Conservationist Date